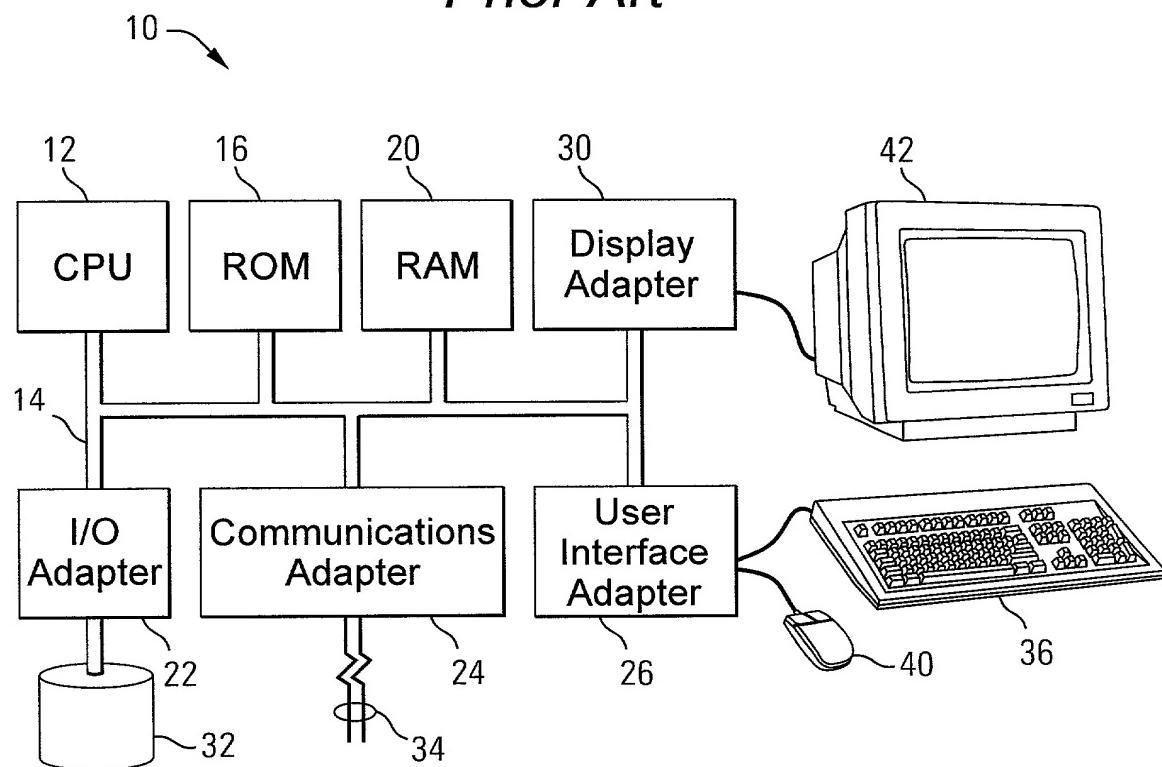


*Prior Art*



**FIG. 1**

Title COMPILER ALGORITHM TO IMPLEMENT SPECULATIVE STORES  
Inventors: Paolo Faraboschi  
Docket No.: 10011518-1  
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Phone No.: (970) 898-3886

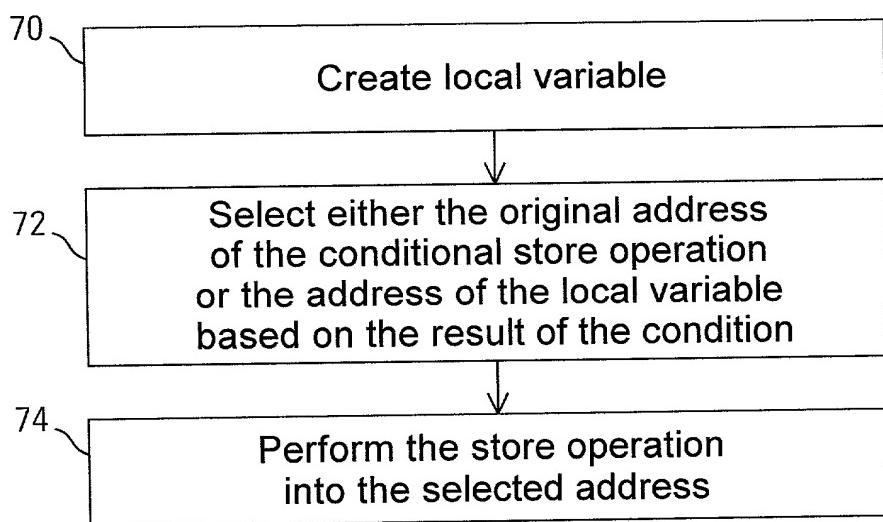
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```
if (a > 0) {  
    *p = 10;  
}
```

**FIG. 2**

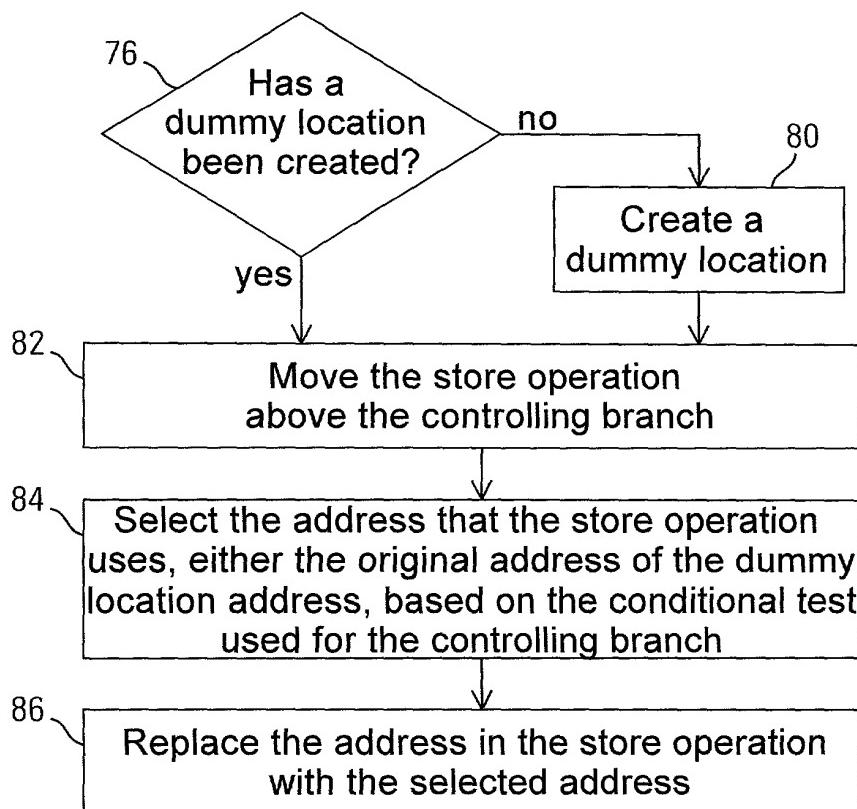
```
0  load $r1 = [a]  
1  cmple $r3 = $r1, 0  
2  branch $r3, L1  
3  load $r2 = [p]  
4  store $[r2] = 10  
5  L1:
```

**FIG. 3**



**FIG. 4**

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**FIG. 5**

```
{
    int dummy;
    int* p1 = (a > 0) ? p : &dummy;
    *p1 = 10;
}
```

**FIG. 6**

0	load \$r1 = [a]
1	load.spec \$r2 = [p]
2	cmpgt \$r3 = \$r1, 0
3	select \$r4 = \$r3 ? \$r2, dummy
4	store \$[r4] = 10

**FIG. 7**

0	load \$r1 = [a]
1	load.spec \$r2 = [p]
2	cmpgt \$r3 = \$r1, 0
3	move \$r4 = dummy
4	cmove \$r4 = \$r3, \$r2
5	store \$[r4] = 10

**FIG. 8**